

Fig. 1A

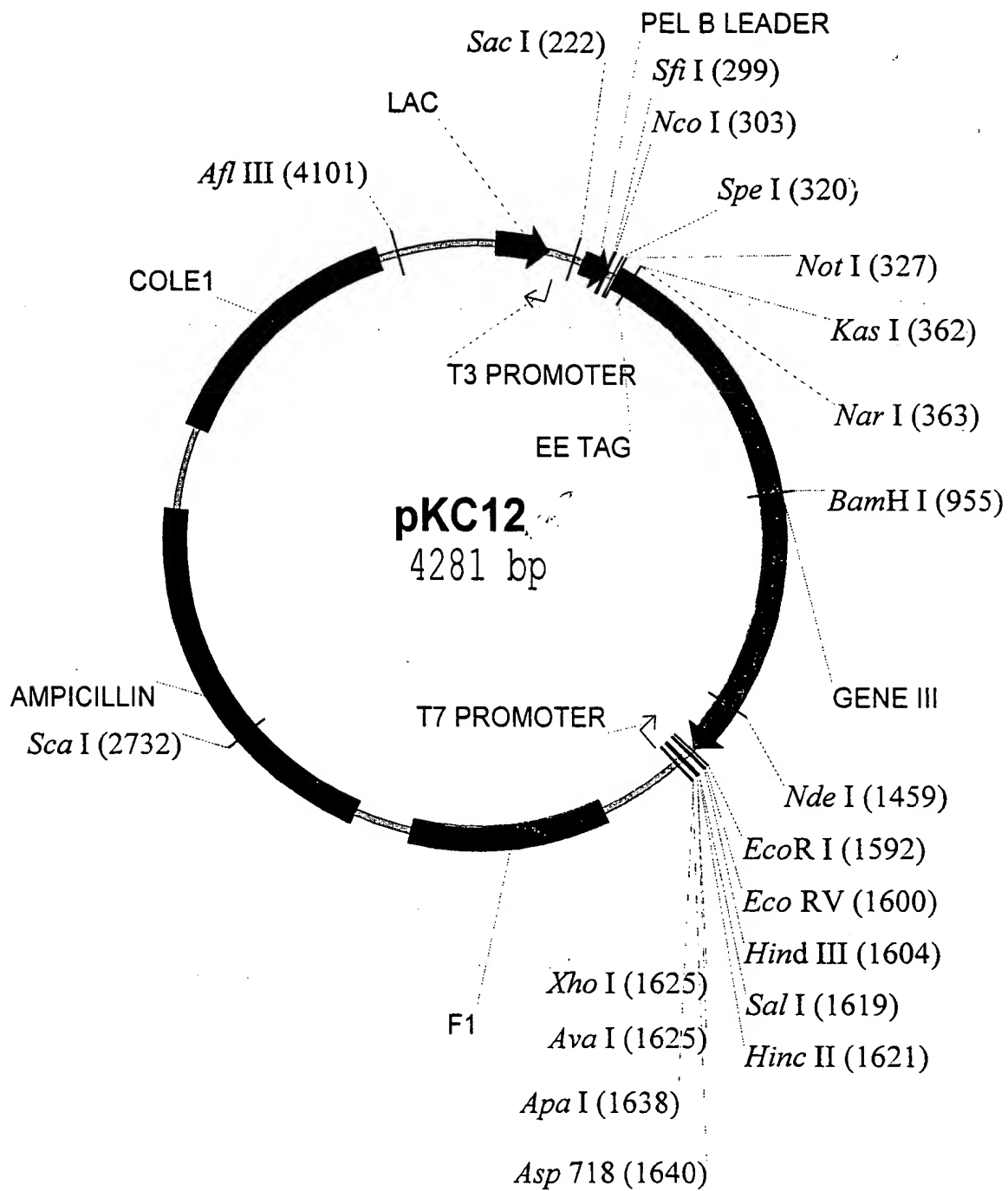


Fig. 1B

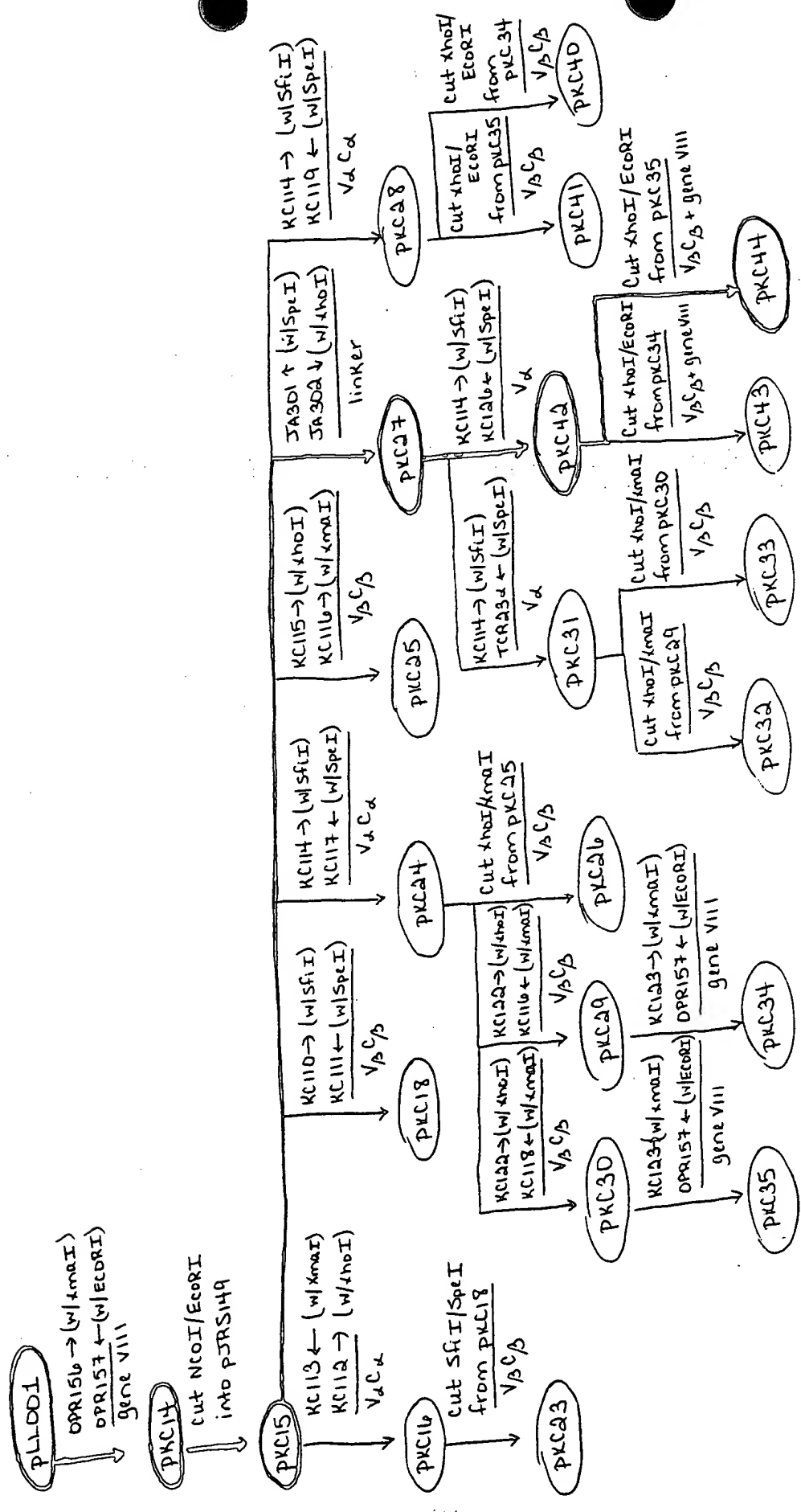


Fig. 2

A<sup>+</sup>  
pK44

phoA	pelB	L.S.	V $\alpha$ chain	(G4S) <sub>4</sub>	V $\beta$ C $\beta$ chain	g8-stop
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B<sup>+</sup>  
pK46

lacZ	pelB	L.S.	V $\alpha$ chain	(G4S) <sub>4</sub>	V $\beta$ C $\beta$ chain	EE tag	gIII-stop
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amber stop  
↓

C<sup>+</sup>  
pK51

lacZ	pelB	L.S.	V $\alpha$ chain	(G4S) <sub>4</sub>	V $\beta$ C $\beta$ chain	g8-stop
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Fig. 3

PKC12

KC134  $\uparrow$  (w/PstI)  
KC135  $\downarrow$  (w/NotI)  

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to introduce XmaI  
Site

PKC45

cut SfiI/XmaI  
from PKC44  

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 $V_{\alpha}$  + linker +  $V_{\beta C\beta}$

PKC46

cut XmaI/EcoRI  
from PKC44  

---

gene VIII

PKC51

Fig. 4

00013781-020797

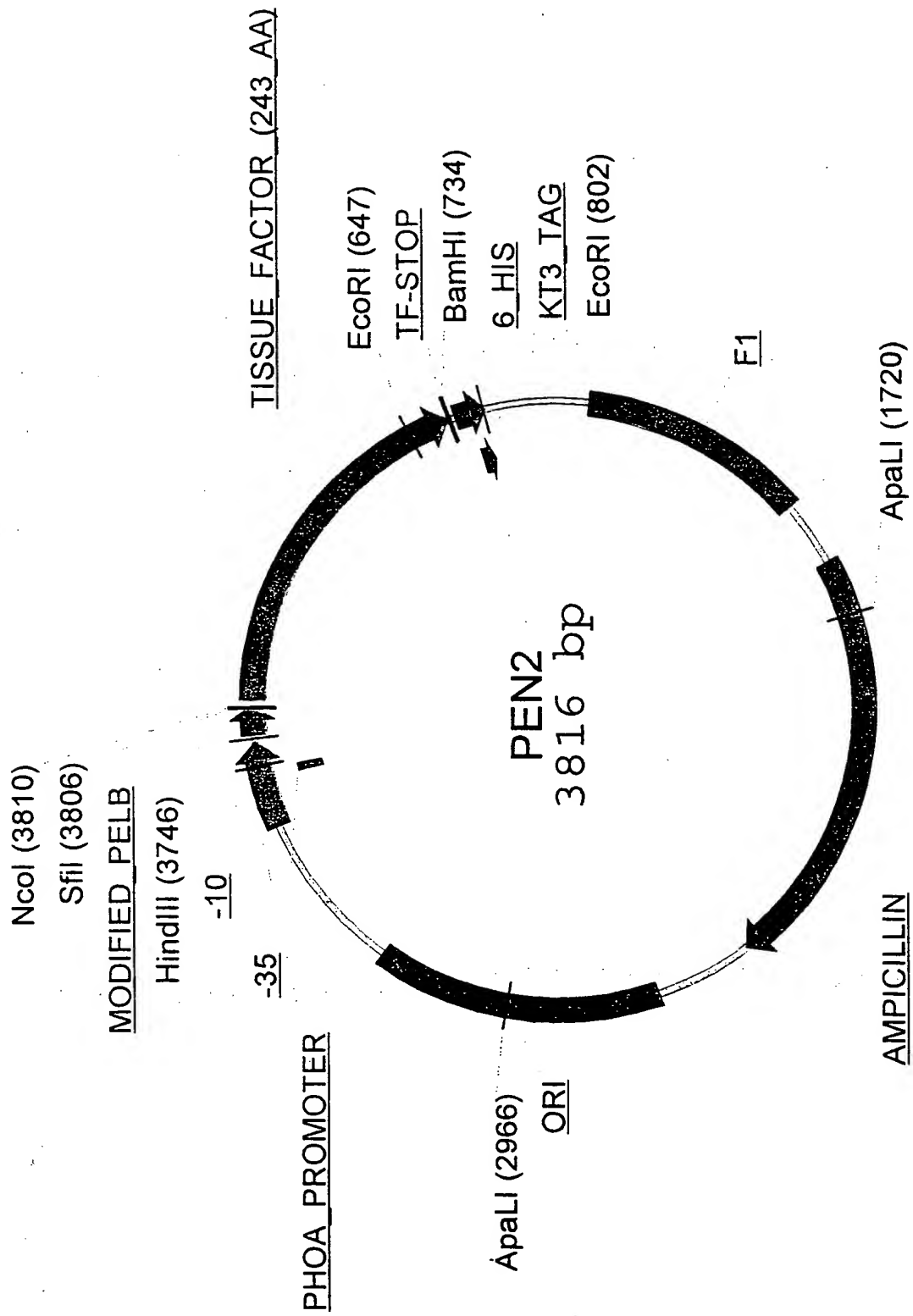


Fig. 5

PKC $\alpha$ 1

pho A	mod. p <sub>el</sub> B L.S.	$\frac{1}{4}$ chain	(G <sub>4</sub> S) <sub>4</sub>	$\frac{1}{5}$ chain	EE tag - 6 his - stops
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PKC $\alpha$ 3

pho A	mod. p <sub>el</sub> B L.S.	$\frac{1}{4}$ chain	(G <sub>4</sub> S) <sub>4</sub>	$\frac{1}{5}$ chain	EE tag - 8 - 6 his - stops
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PKC $\alpha$ 5

pho A	mod. p <sub>el</sub> B L.S.	$\frac{1}{4}$ chain	(G <sub>4</sub> S) <sub>4</sub>	$\frac{1}{5}$ chain	EE tag - 8 - 3 - 6 his - stops
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Fig. 6A

prcl6D

ph0A	mod. p1B L.S.	$V_d C_{d, \text{chain}}$	$(G_{45})_1$	$V_{d, C_{d, \text{chain}}}$	EE 10g - Stop
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prcl6A

ph0A	mod. p1B L.S.	$V_d C_{d, \text{chain}}$	$(G_{45})_1$	$V_{d, C_{d, \text{chain}}}$	EE 10g - q8 - Stop
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prcl6I

ph0A	mod. p1B L.S.	$V_d C_{d, \text{chain}}$	$(G_{45})_1$	$V_{d, C_{d, \text{chain}}}$	EE 10g - q3 - Stop
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prcl6b

ph0A	mod. p1B L.S.	$V_d C_{d, \text{chain}}$	$(G_{45})_1$	$V_{d, C_{d, \text{chain}}}$	EE 10g - q8 - Stop
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prcl6f

ph0A	mod. p1B L.S.	$V_d C_{d, \text{chain}}$	$(G_{45})_1$	$V_{d, C_{d, \text{chain}}}$	EE 10g - Stop
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Fig. 6B

08813781.030797

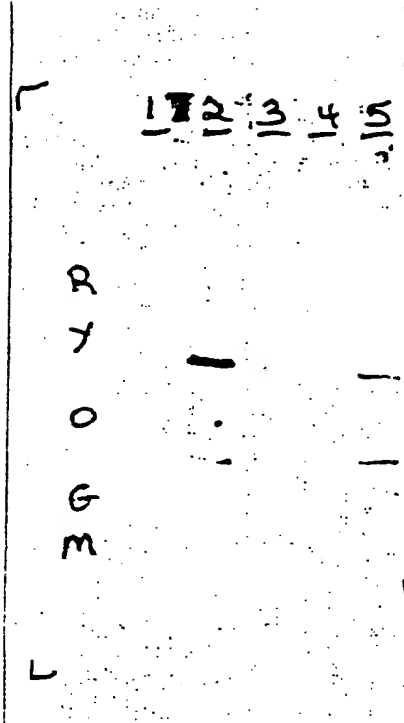


Fig 7

00047781-000797

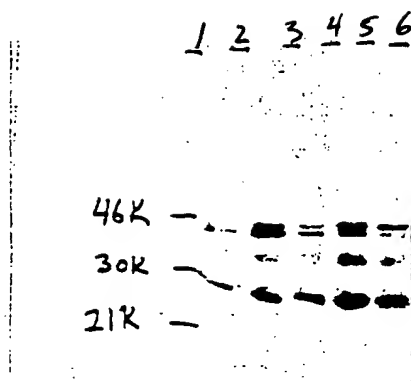


Fig. 8

Affinity Purification of scTCR/geneVIII Fusion Protein

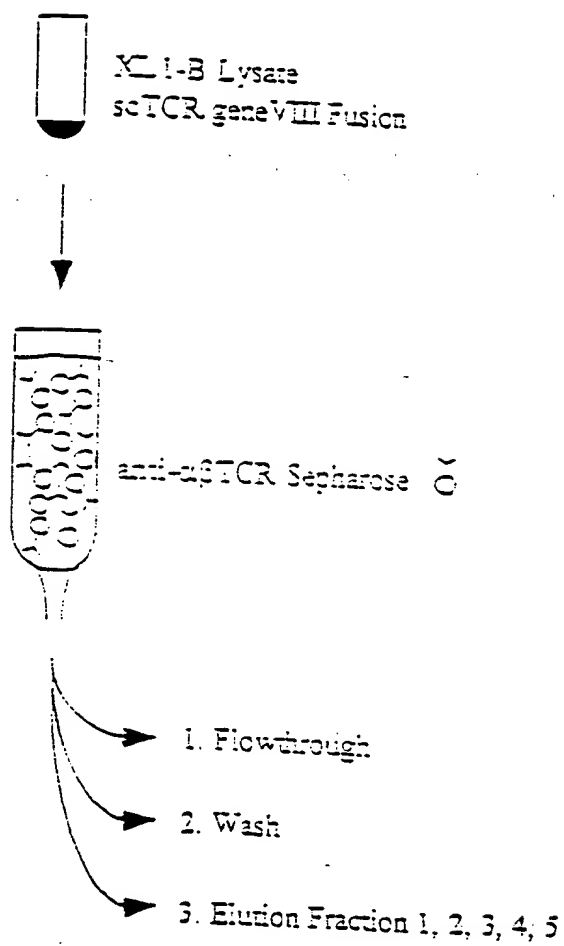


Fig. 9

0813784 030797  
262060-182ET880

08013701.030797

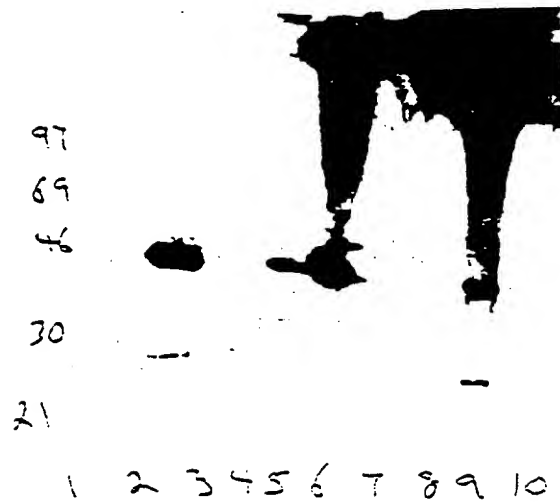


Fig. 10

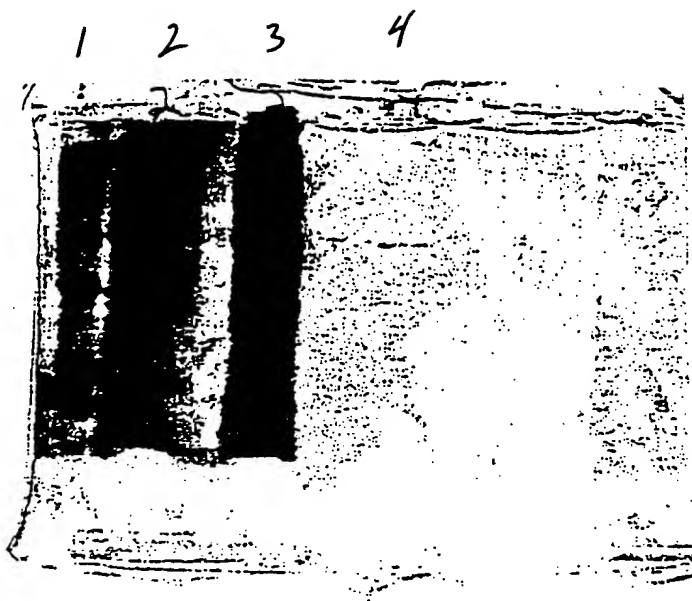


Fig. 11

08813781.030797

08013781-030797

1 2 3 4 5

P-

Y-

O-

B-

R-

Fig. 12

08613781-030797

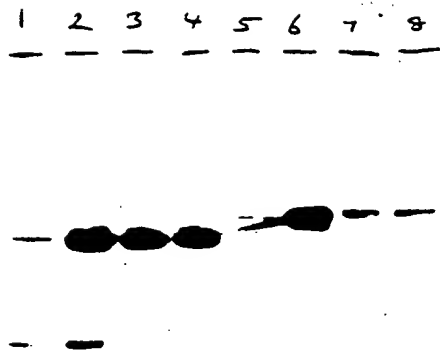


Fig. 13

08813781.030797  
26/05/00 15:25:00

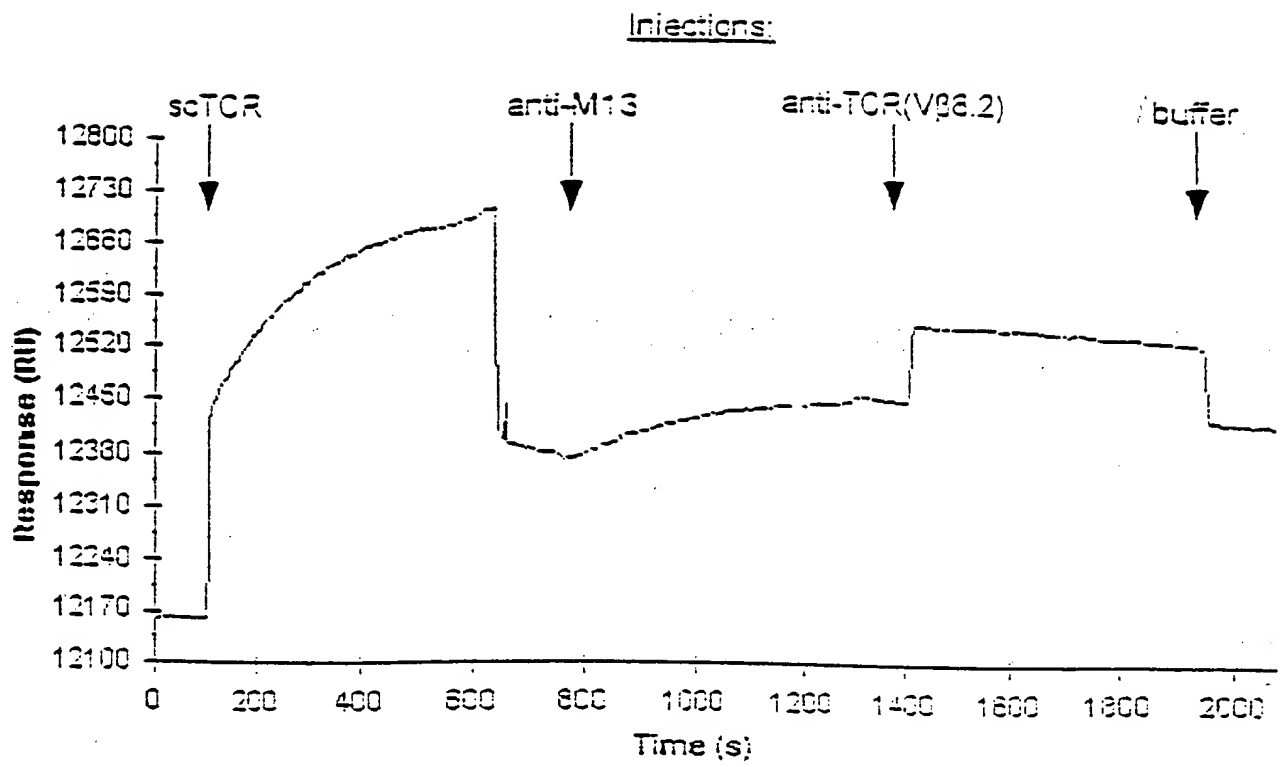


Fig. 14

08513781.030797  
6/06/00 T8/EFB0

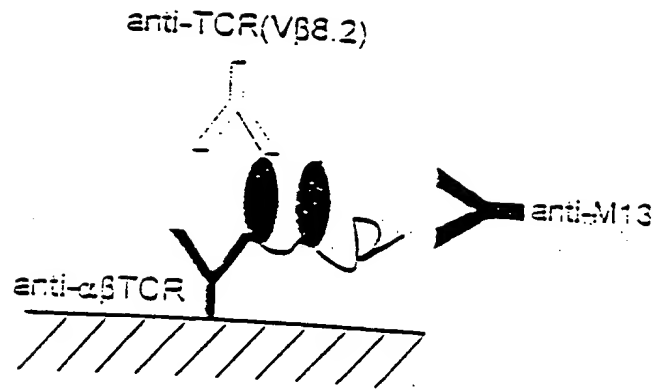


Fig 15

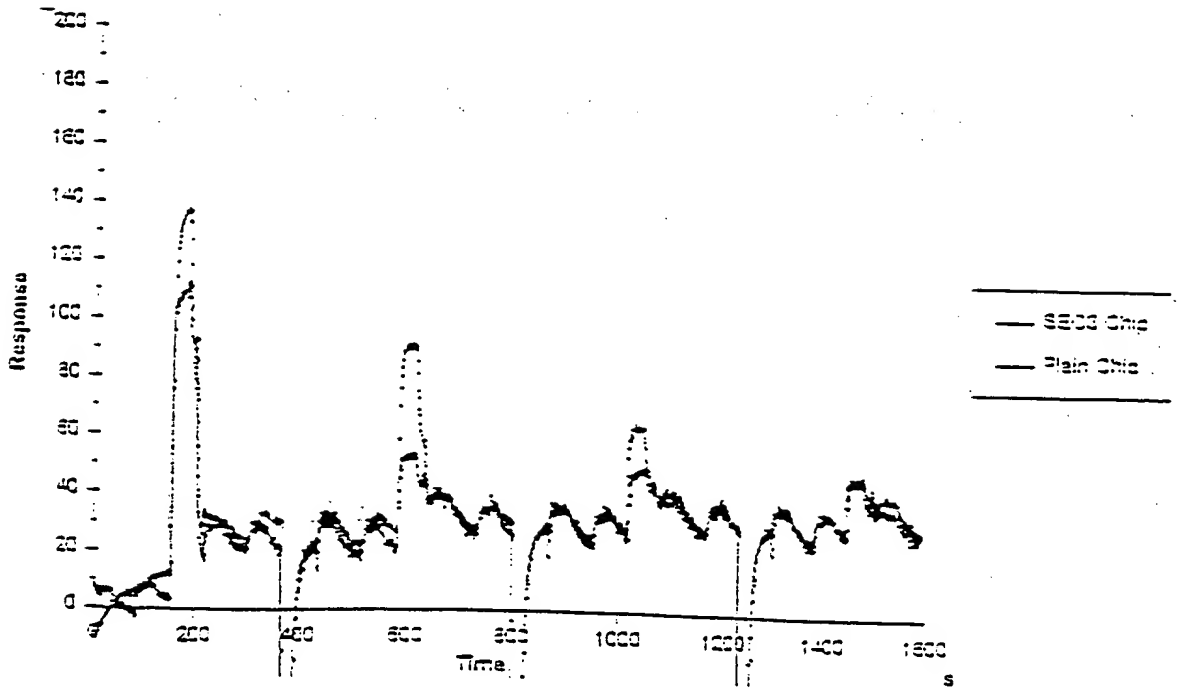


Fig. 16

262060" 182ET880

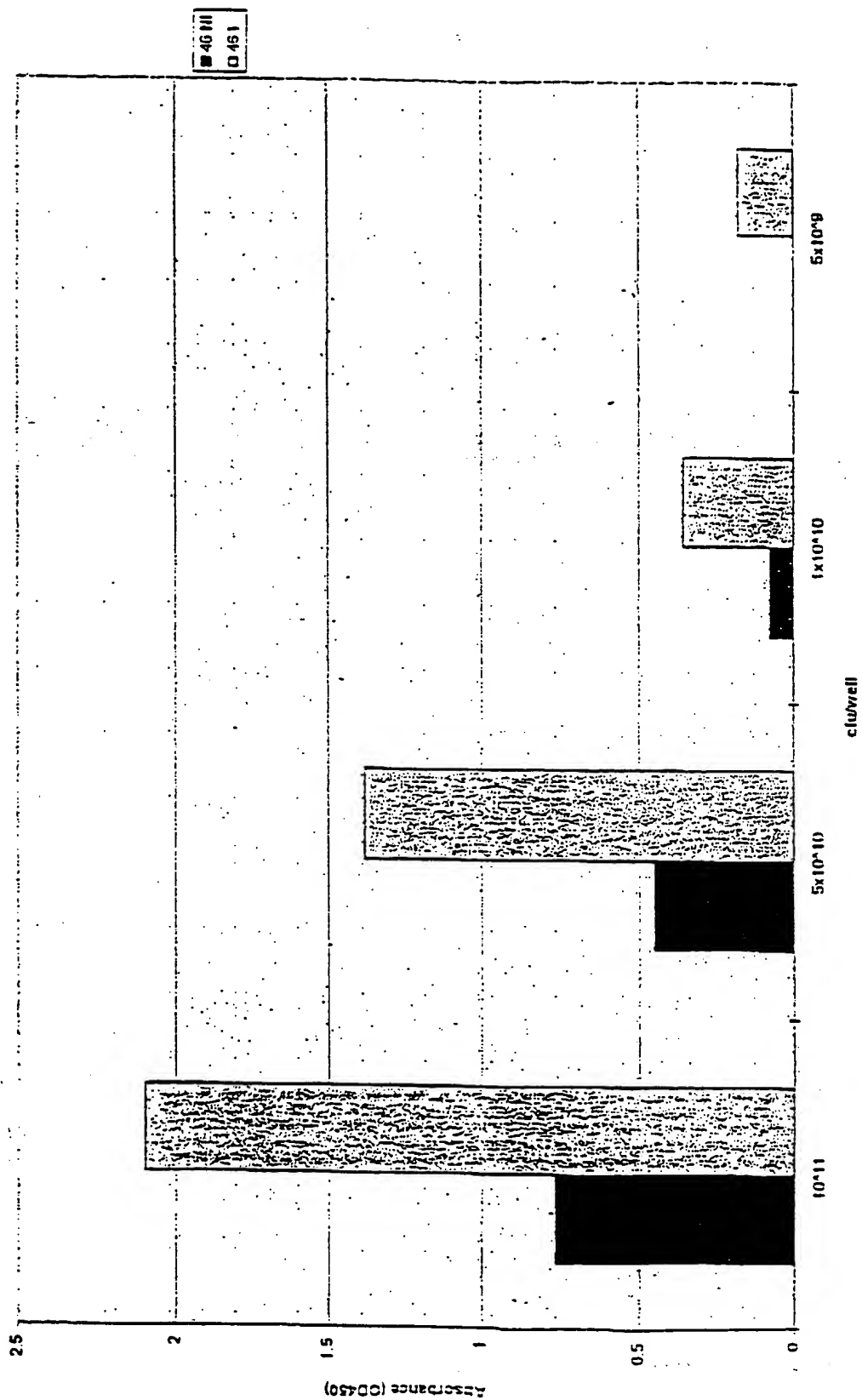


Fig. 17

2620E0-18/E1880

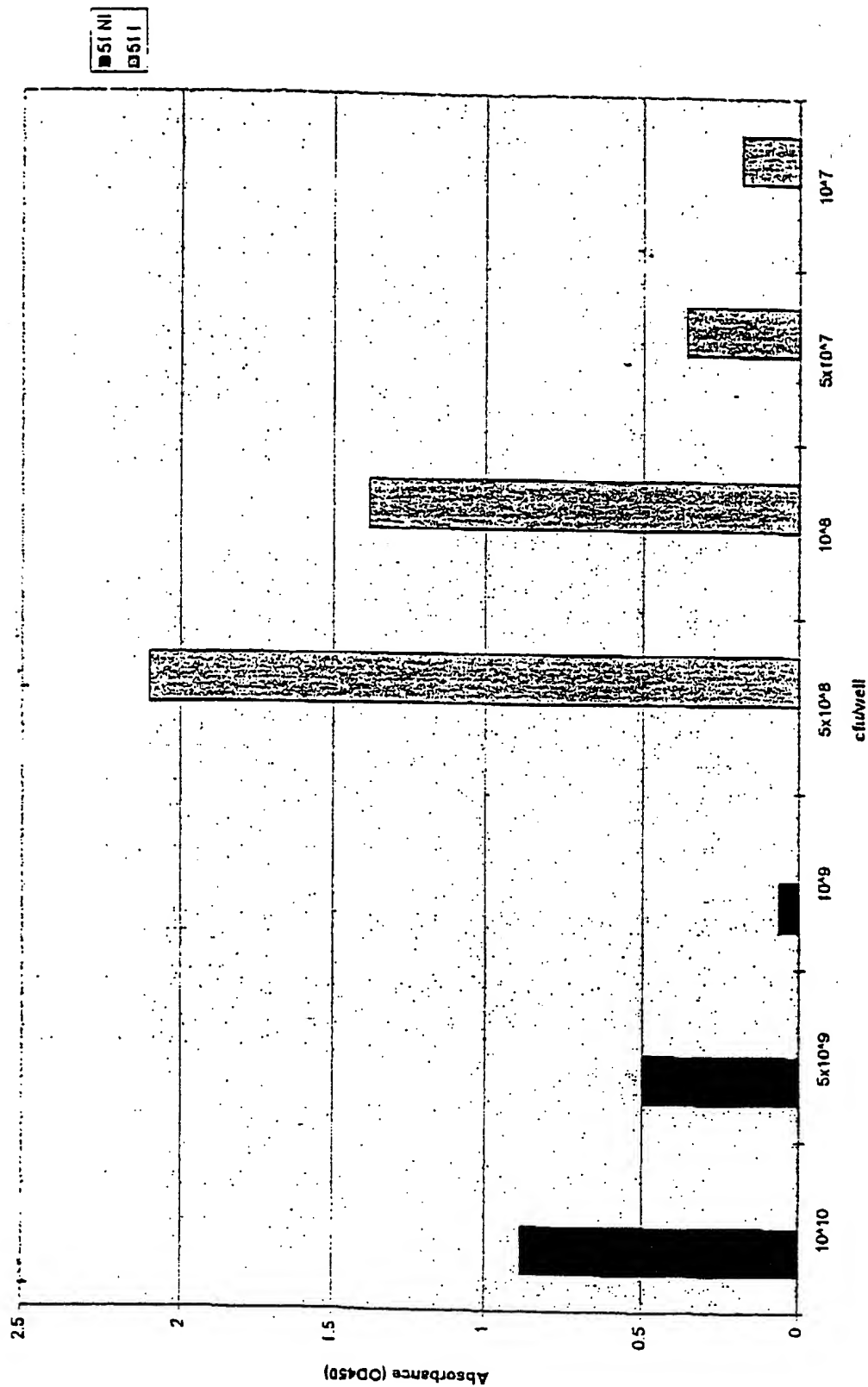


Fig. 18

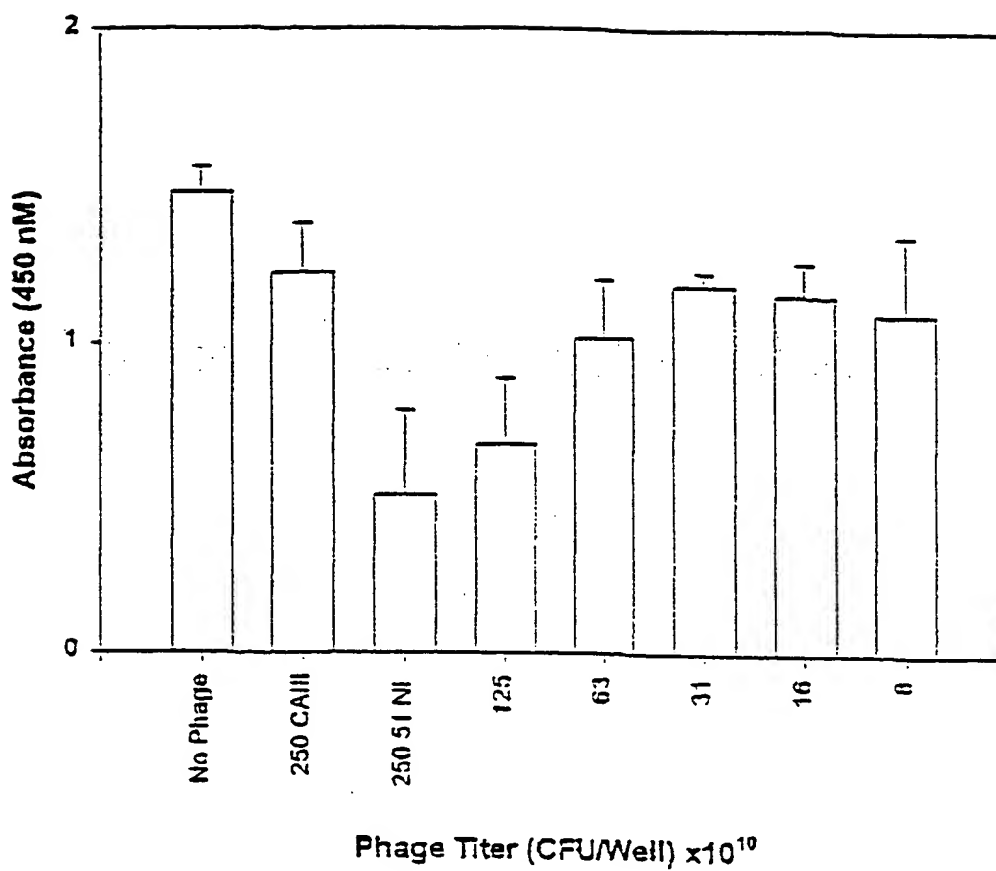


Fig. 19-A

262050-18/ET030

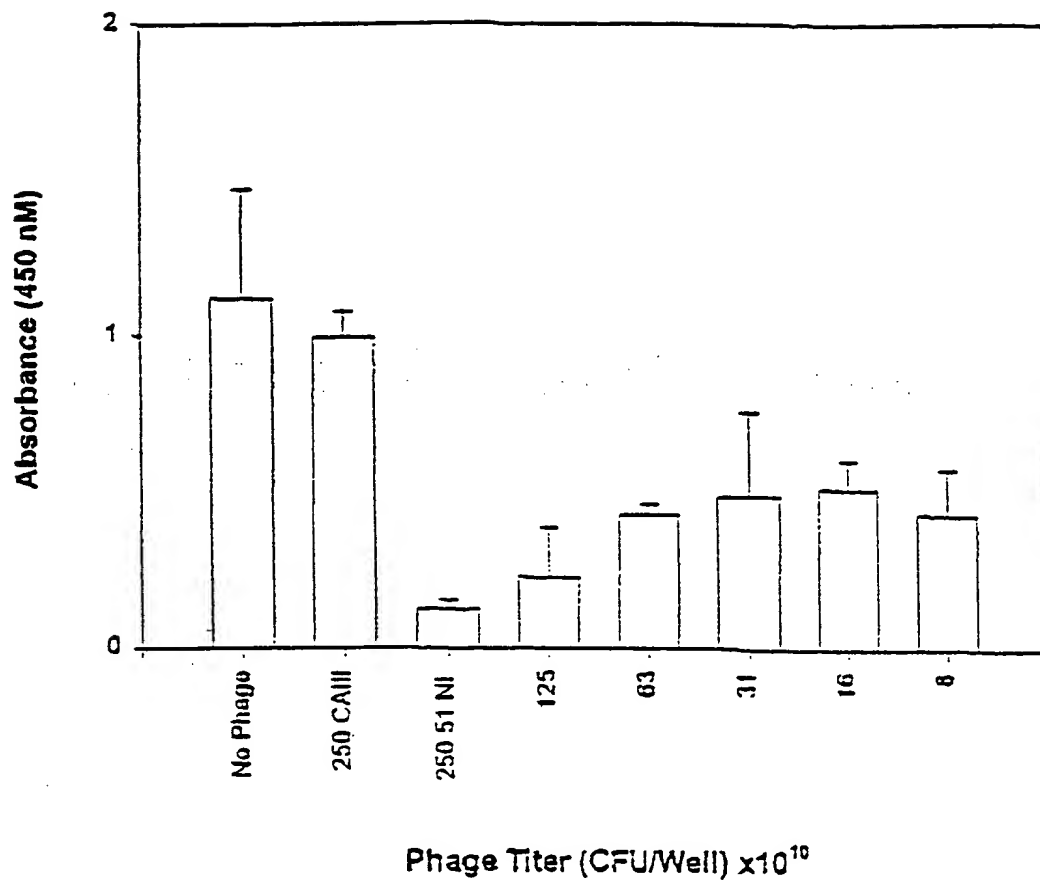


Fig. 19-B

prc70

tuc	wild-type L.S.	$V_d$ chain	$(G_{15})_1$	$V_{\beta C \beta}$ chain	EF-10g - g8-stop
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prc71

tuc	wild-type L.S.	$V_d$ chain	$(G_{15})_1$	$V_{\beta C \beta}$ chain	g8-stop
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prc72

tuc	wild-type L.S.	$V_d$ chain	$(G_{15})_1$	$V_{\beta C \beta}$ chain	$(G_{15})_2$ g8-stop
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Fig. 20

Primer	Seq Id No	Sequence (5' to 3')
KC100	001	CGG CCA TGG CCC AGC TGC AGA CTA GTG C
KC101	002	GGC CGC ACT AGT CTG CAG CTG GGC CAT GGC CGG CT
KC110	003	CTC GCG GCC CAG CCG GCC ATG GCC GAG GCT GCA GTC ACC CAA AGC
KC111	004	CTT CCT CAC TAG TAC AGT CTG CTC GGC CCC AG
KC112	005	GAT GGC CTC GAG GAG CAG GTG GAG CAG CTT
KC113	006	GAC TAG CCC GGG ACA GGG AAC GTC TGA ACT GGG
KC114	007	CTC GCG GCC CAG CCG GCC ATG GCC GAG CAG GTG GAG CAG CTT CCT
KC115	008	CTC GCG CTC GAG GAG GCT GCA GTC ACC CAA AGC
KC116	009	CTC GCG CCC GGG ACA GTC TGC TCG GCC CCA GGC
KC117	010	CTC GCG ACT AGT ACA GGG AAC GTC TGA ACT GGG
KC118	011	CTC GCG CCC GGG GTC TGC TCG GCC CCA GGC
KC119	012	CTC GCG ACT AGT GGG AAC GTC TGA ACT GGG
KC120	013	CTC GCG ACT AGT GTC TGC TCG GCC CCA GGC
KC121	014	CTC GCG CCC GGG GGG AAC GTC TGA ACT GGG
KC122	015	CTC GCG CTC GAG CGA GGC TGC AGT CAC CCA AAG C
KC123	016	GGG GGG CCC GGG GCT GAG GGT GAC GAT CCC GCA AAA G

Fig. 214

Primer	Seq Id No	Sequence (5' to 3')
KC124	017	CTA GTC TGG TGG CGG TGG CAG CGG CGG TGG TGG TTC CGG TGG CGG CGG TTC TGG CGG TGG CGG TTC C
KC125	018	TCG AGG AAC CGC CAC CGC CAG AAC CGC CGC CAC CGG AAC CAC CAC CGC CGC TGC CAC CGC CAC CAG A
KC126	019	GTG CTC ACT AGT GTT TGG CTC TAC AGT GAG TTT GGT G
KC127	020	GAT GGC TCG AGT GAG CAG GTG GAG CAG CTT CCT
KC128	021	CTA GTC CCC GGG TAC AAC TGT GAG TCT GGT TCC
KC129	022	CTC GAG ACT AGT TAC AAC TGT GAG TCT GGT TCC
KC130	023	CGG CCG AGG AAG AAG AGT ACA TCC CGA TGG ATC
KC131	024	GGG CCA TCC ATC GGG ATG TAC TCT TCT TCC TCG GCC GGC T
KC132	025	CCG GGG AGG AAG AAG AGT ACA TCC CGA TGG ATT GAG
KC133	026	AAT TCT CAA TCC ATC GGG ATG TAC TCT TCT TCC TCC
KC134	027	GCC CGG GAC TAG TGC
KC135	028	GGC CGC ACT AGT CCC GGG CTG CA
KC136	029	CTA GTC CCC GGG TCA TCA AGC GGC GCC TTC CAT CGG CAT GTA CTC TTC TTC CTC TAC AAC TGT GAG TCT GGT TCC
KC137	030	CTA GTC CCC GGG TCA TCA AGC GGC GCC TTC CAT CGG CAT GTA CTC TTC TTC CTC GTC TGC TCG GCC CCA GGC

Fig. 21 B

0011781-03097

Primer	Seq Id No	Sequence (5' to 3')
KC138	031	CTA GTC CCC GGG TAC AAC TGT GAG TCT GGT TCC
KC139	032	CCG GGG AGG AAG AAG AGT ACA TGC CGA TGG AAG GCG CCG CTT AGC
KC140	033	CCT CCT TCT TCT CAT GTA CGG CTA CCT TCC GCG GCG AAT CGG GCC
KC141	034	GAT CAG CCC GGG GAG GCT GCA GTC ACC CAA AGC
KC142	035	CTA GTC CCC GGG ACA GTC TGC TCG GCC CCA CCG
KC143	036	CCG GGG AGG AAG AAG AGT ACA TGC CGA TGG AAG GCG CCG CTC
KC144	037	CCT CCT TCT TCT CAT GTA CGG CTA CCT TCC GCG GCG AGG GCC
KC145	038	CGC CGC TCA CCA TCA CCA TCA TCA CTG ATG AC
KC146	039	GGC GAG TGG TAG TGG TAG TAG TGA CTA CTG GGC C
KC147	040	GAT CAG GGC GCC GCT ACT GTT GAA AGT TGT TTA
KC148	041	CTG ATC GGA TCC TCA TTA AAG CCA GAA TGG AAA
KC149	042	CCG GGC TAA GCG GCG CCT TCC ATC GGC ATG TAC TCT TCT TCC TCC
KC150	043	CCG GGA GCG GCG CCT TCC ATC GGC ATG TAC TCT TCT TCC TCC
KC151	044	CCG GGT CAT CAG TGA TGA TGG TGA TGG TGA GCG G
KC152	045	GCT CGA GCT TAC TCC

Fig. 21C

00013751-030797

Primer	Seq Id No	Sequence (5' to 3')
KC153	046	CGC TCA TTA GGC GG
KC154	047	GTG TAC TTC TGT GCC
KC155	048	CTG TGA GTC TGG TTC
KC156	049	GCA GGT ICT GGG TTC
KC157	050	CAT TTA CTA ACG TCT GG
KC158	051	CGC CTG GTA CTG AGC
KC159	052	CCT CAA CCT CCT GTC
KC160	053	CTT ATT CCG TGG TGT C
KC161	054	CCA CCC TCA GAA CCG
KC162	055	GAA TTT ACC GTT CCA G
KC163	056	CTT TAG CGT CAG ACT G
KC164	057	GAA ACG CAA AGA CAC C
OPR156	058	GGG GGG CCC GGG CTG CTG AGG GTG ACG ATC CCG CAA AAG
OPR157	059	GGG GGG GAA TTC TAT TAG CTT GCT TTC GAG GTG AAT TTC
JWTCR222	060	GAG CAC GGC CCA GCC GGC CAT GGC CGA GGC TGC AGT CAC CC
JWTCR221	061	GAG CAC GAG ACT AGT AGC ACG AAC AAC ACG GTC GTC GAT CGG TTC CGG CGG GTT TGG CTC TAC AGT GAG
JWTCR220	062	GAT CCC TCC TGG ACA CGC AGG ATG GAA GGA AGC TGC TCC ACC TGC TCA GCA CGA ACA ACA CGG TCG TCG ATC GGT TCC GGC GGG GC
JWTCR 219	063	CAT GGC CCC GCC GGA ACC GAT CGA CGA CCG TGT TGT TCG TGC TGA GCA GGT GGA GCA GCT TCC TTC CAT CCT GCG TGT CCA GGA GG

Fig. 21D

Primer Seq Id No

Sequence (5' to 3')

JWTCR218 064

GAG GTG GAA TTC TAT TAA GAC TCC TTA TTA  
CGC AGT ATG

JWTCR217B 065

GAG GAG GTG GTG ACT AGT AGC AGG TTC TGG  
TGG GTT CTG GAT GTT TGG CTC TAC AGT GAG

JWTCR217 066

GAG GAG GTG GTG ACT AGA AGC AGG TTC TGG  
GTT CTG GAT GTT TGG CTC TAC AGT GAG

JWTCR216 067

GAG GTG GAA TTC TAT TAG TGA TGA TGG TGA  
TGG TGA GAC TCC TTA TTA CGC

JWTCR215 068

GAG GTG CCC GGG ACT GTT GAA AGT TGT TTA GC

JWTCR214 069

GAG GTG GAA TTC TAT TAG TGA TGA TGG TGA  
TGG TGG CTT GCT TTC GAG G

JWTCR213 070

GAG GTG GAA TTC TAT TAG CTT GCT TTC GAG G

JWTCR212 071

GAG GTG CCC GGG GCT GAG GGT GAC GAT CCC G

JWTCR211 072

AAT TCT CAT CAG TGA TGA TGG TGA TGG TGC

JWTCR210 073

CCG GGC ACC ATC ACC ATC ATC ACT GAT GAG

JWTCR209 074

GTG GAG CCC GGG TTC CAT CGG CAT GTA CTC  
TTC TTC CTC TAC AAC TGT GAG TCT GG

JWTCR208 075

GAG GTG GAA TTC TCA CCC GGG TTC CAT CGG  
CAT GTA CTC TTC TTC CTC GTC TGC TCG GCC CCA  
G

JWTCR207 076

GAG GTG CTG CAG GTT CCA TCG GCA TGT ACT  
CTT CTT CCT CGT CTA GAC GGC CCC AGG CCT C

JWTCR206 077

GTG GAG CTG CAG GGT CTA GAC GGC CCC AGG  
CCT C

JWTCR204 078

GTG GAG CTG CAG GTG ATC CAC CCC CTC CAG  
ATC CAC CCC CTC CGT CTG CTC GGC CCC AG

JWTCR202 079

GTG GAG AAG CTT TGC CGA GCA GGT GGA GCA  
GC

Fig. 21 E

00813781-030797

Primer Seq Id No

Sequence (5' to 3')

JWTCR200A 080

GGG GGG GAG GTG CTC GAG CGA GGC AGC AGT  
CAC C

JWTCR23A 081

GAG CCC ACT AGT TTG GCT CTA CAG TGA GTT  
TGG TG

JWTCR1 082

CTA GAC CAG CAA ATC TGC ACC CAC AGA ATC  
CCT AGG ACA GCT CCC AGG TTC CTC TGC ATG  
GTG GA

JWTCR2 083

AGC TTC CAC CAT GCA GAG GAA CCT GGG AGC  
TGT CCT AGG GAT TCT GTG GGT GCA GAT TTG  
CTG GT

JWTCR3 084

GAT CGG TCT AGA GGT GAG CAG GTG GAG CAG  
CTT CC

JWTCR4 085

GCC TGG AGA CTC AGC CAT G

JWTCR5 086

GAA GTA CAT GGC TGA GTC TCC

JWTCR6 087

GAT GAA CGT TCC AGA TTC CAT GG

JWTCR7 088

CCC AAA TCA ATG TGC CGA AAA C

JWTCR8 089

CTA GAA CAC AGG AGA CTG GAG AGC ACG AAG  
AAG AGC CTG GAG CCC ATG GTG GA

JWTCR9 090

GCT CTC CTT GTA GGC CTG AG

JWTCR10 091

GTA CTT CTG TGC CAG CGG TG

JWTCR11 092

GAG CAA TTA TAG CTA CTG CCT G

JWTCR12 093

GGT CTG GAG GCC TTG TAT CC

JWTCR13 094

AGC TTC CAC CAT GGG CTC CAG GCT CTT CTT CGT  
GCT CTC CAG TCT CCT GTG TT

JA501 095

TCG AGG AAC CGC CAC CGC CAG AAC CGC CGC  
CAC CGG AAC CAC CAC CGC CGC TGC CAC CGC  
CAC CA

Fig. 21F

000137-030797-2620ED-184ET880

Primer

Seq. Id No.

JA302

96

CTA GTG GTG GCG GTG GCA GCG GCG GTG GTG  
GTT CCG GTG GCG GCG GTT CTG GCG GTG GCG  
GTT CC

Kozak consensus

97

CCACCATG

98

Glu Glu Glu Glu Tyr Met Pro Met Glu  
1 5

99

ATG AAA TAC CTG CTG CCG ACC GCA GCT GCT  
GGT CTG CTG CTG GCT GGC GGC CCA AGC CGA  
TGG CC

100

MKY LLP TAA AAL LLL AAQ PAM

080137-030797

Fig. 21 G

**0891701**

1 28

**5' - TTT GAT CCG GCT GCA GGC AAT GGG AGG ACC**

**SpoT**

5' -GATGGAGTACCTGCGCCGTGCGTGTCGCGC-AGAGGAGGTTTC-3'  
3' -GATCAAGGATGAGTGCACCTCATCGAAGGATGAGGAGGATGAT-5'

Fig. 22

DCR-78 ENCLT:

101	5'- <u>GGGGGG</u> TGGGGGTCGAGCGTCGAGCGC	Vβ2,4
102	5'- <u>GGGGGG</u> TGGGGGMRGARGHSAACC	10,14
103	5'- <u>GGGGGG</u> TGGGGGTGCGAAGGAAACC	3
104	5'- <u>GGGGGG</u> TGGGGGMRGARGCTTTCAC	11,9
105	5'- <u>GGGGGG</u> TGGGGGTCGAGCGCGTCGAC	13,5-1
106	5'- <u>GGGGGG</u> TGGGGGATGGGGGCGTCGAC	13
107	5'- <u>GGGGGG</u> TGGGGGTCGAGCGTCGAGCGC	6
108	5'- <u>GGGGGG</u> TGGGGGTGCGAGCTGAGCGC	8-3,12
109	5'- <u>GGGGGG</u> TGGGGGTCGAGCGTCGAGCGC	1
110	5'- <u>GGGGGG</u> TGGGGGTCGAGCGTCGAGCGC	8-1,2,4
111	5'- <u>GGGGGG</u> TGGGGGTGCGAGCTGAGCGC	8-3,15
112	5'- <u>GGGGGG</u> TGGGGGTCGAGCGTCGAGCGC	16
113	5'- <u>GGGGGG</u> TGGGGGTGCGAGCTGAGCGC	20

TCR-7B BACK:

**Mixtura c:**

114  
115

**5' -GATGCCA.CCG-CCA.CCCAGGTTTGTTCAGGTCC**

No. 1

<sup>a</sup>Two codons were added, because full length vβ20 cDNA was not available.

Fig. 23